The Heavy Brigade in Restricted Terrain

Division Reserve Operations (Defense)

by Lieutenant Colonel John L. Arata

In Korea, even on relatively flat valley floors, visibility is restricted by man-made features and the land's contours. Rice paddies and their dikes also restrict mobility.

- All photos by the author

"Division reserve. No sweat," thought Major Misconception, the brigade S3. "When I was a battalion 'three,' we were the brigade's habitual reserve, and that wasn't too tough. Occupy an assembly area or battle position in depth, and be prepared to attack into the brigade engagement area to finish off the enemy, or pick up 'leakers' through the main defense. After all, a brigade is just a battalion on steroids..."

WRONG! Contrary to popular opinion (and unfortunately, contrary to some of our field manuals), the heavy brigade is not merely a big battalion. The brigade headquarters must set the conditions for success — for its assigned task forces, as well as for its parent division. Divisions can compensate for brigades that abrogate this responsibility... if there is sufficient suitable terrain to allow the movement and proper positioning of assets in spite of the brigade.

Let's face it. As our heavy forces become heavier, and our supporting arms "heavy up" too, we begin to restrict our ability to use terrain. Our tanks, infantry/cavalry fighting vehicles, howitzers, and other tracked combat vehicles are best able to maximize their mobility, firepower, and shock effect when they can deploy into appropriate formations and move rapidly across the battlefield. Similarly, our wheeled logistical vehicles need suitable routes on which to move, or our combat forces will quickly be brought to their knees.

Now consider operating in an area where a single two-lane road (with no shoulders, many small bridges crossing unfordable streams, and transiting many small villages) is simultaneously the main supply route for two brigades, the evacuation route for casualties, damaged equipment, displaced civilians/refugees, and prisoners of war, and is the division reserve's counterattack route. Sound like a recipe for gridlock? It is, unless every brigade headquarters is in the game, and acts in coordination with the rest of the division. One five-ton truck on the road at the wrong place or time can unhinge the timely commitment of the division's reserve.

Field Manual 71-100, *Division Operations* states that the primary purpose of the division reserve is to provide flexibility and retain the initiative through offensive action. The secondary purposes of the reserve are to reinforce the defense of committed forces, contain enemy forces that have penetrated the FEBA, react to rear area threats, relieve depleted units, and provide for continuous operations. In order to fulfill these requirements, the reserve force must be able to rapidly concentrate its combat power at the critical point in the division's sector.

In restrictive terrain, the difficulty of moving a heavy force quickly within the division's sector is likely to drive the division commander to retain a larger reserve than he would otherwise, and to position it at multiple sites throughout the division's sector in order to reduce the time required to deliver a task force to any given point. Let's assume that the division commander has decided he wants to be able to rapidly concentrate and commit a two-task force-sized reserve within the division's sector. To achieve the flexibility and desired speed of commitment, he has decided to place three task forces in assembly areas across the division's sector. How do we constitute this reserve force?

Two methods of constituting the reserve come to mind. First, the division commander could structure the division's defense with three brigade combat teams in the Main Battle Area (MBA), and direct each brigade to maintain a task force in reserve, with a division "string" requiring the division commander's authorization to commit them. We'll refer to this as the "virtual reserve" option. Second, the division commander could structure the division's defense with two brigade combat teams in the MBA, and the third in positions/assembly areas across the division's sector as the division's reserve. We'll refer to this as the "reserve brigade" option.

The Virtual Reserve

The virtual reserve option, then, gives the division commander a brigade combat team's worth of task forces, but

without the command, control, communications, computers and intelligence (C4I) structure to employ them as an integrated, cohesive force. Some would argue these task forces could be commanded by the assistant division commander for maneuver (ADC-M), using a portion of the division's C4I structure, when the need arose. On order, the virtual reserve would be activated, task forces chopped to division control, and the reserve could be rapidly repositioned or committed in a division counterattack. Anyone who has attempted to change task organization "on the fly" will quickly recognize several significant areas of concern. First, and arguably most critical, is that as an ad hoc unit, the division's reserve will have rarely, if ever, trained together prior to commitment. Its C4I structure and staff may be a "pick-up" crew culled from the division staff at the last moment. This arrangement certainly negates the "train as you will fight" precept of FM 25-101, and by the ad hoc structure of the C4I system and of the unit itself, negates our ability to develop and exploit the potential strength of our combat function "Battle Command" for the reserve force. Additional concerns with the "virtual reserve" include logistical support for the task forces, dedicated field artillery, air defense artillery, engineer, intelligence/electronic warfare (IEW), and military police headquarters (and units) for the planning and execution of the reserve mission. These concerns are resolvable, but the resolution will likely result in more ad hoc relationships, splitting unit focus at a critical point in the battle (since the reserve is rarely committed when things are going exceedingly well). The committed brigade commanders won't want to part with support slices of air defense or engineers for the departing (reserve) task forces in the middle of the fight.

Much of Korea's terrain is typified here - steep, untrafficable slopes bounding narrow valleys, often less than 1,000 meters wide, and containing streams, rice paddies, or built-up areas.

The Reserve Brigade

The reserve brigade option lessens many of those concerns, but has its own constraints. In this option, the division commander gets a brigade combat team's worth of task forces, along with a trained infrastructure capable of performing all the combat functions required in FM 100-5, *Operations*. While the brigade combat team may not have all the unit assets required for combat operations (notably field artillery, engineer, and/or IEW), there is a battle staff present and trained to plan for their proper employment once those assets are made available. Additionally, as a major subordinate command (MSC) of the division, the brigade and its staff is used to coordinating with the division staff, which may not be the case for subordinate task forces. The constraints in this option revolve primarily around the use of the available terrain — terrain management and setting the conditions for the successful commitment of the division's reserve forces.

There is a finite amount of good terrain available for use in any division's sector — even if 100 percent of it is good. As noted before, heavy forces and their supporting infrastructure tend to do best in trafficable terrain. Radars, sensors, command posts, and other communications sites tend to compete with one another for terrain, with certain elevation and line-of-sight characteristics. In severely restricted terrain, you may be unable to deploy more than one company team into battle formation at a time, with the remainder of the task force's company teams strung along behind as they move up a defile.

The supporting infrastructure (observation, mobility support, etc.) may be unusable if not emplaced in advance of the reserve's commitment. This, then, is where the brigade headquarters is invaluable in restricted terrain; in ensuring the supporting infrastructure that allows the successful commitment of the combat task forces is planned for and emplaced. The remainder of this article discusses planning considerations for the reserve brigade method of establishing the division's reserve force.

Setting the Conditions for Success

So what must the brigade staff do to ensure the division will be able to successfully commit its reserve force at the decisive time and place? The following are some of the critical areas they must consider:

- Positioning task force assembly areas to allow rapid deployment within the division's sector.
- Controlling reserve force deployment routes.
- Planning for changes in the division's task organization/asset handover at the time of reserve force commitment.
- Positioning supporting assets to facilitate reserve force deployment and initial operations.
- Planning for the employment and control of the reserve forces throughout the division's sector.

Positioning Task Force Assembly Areas

This may appear to be a "no-brainer," but the difficulty in doing this properly increases as terrain trafficability decreases. The goal is to position the task forces so they may rapidly move to reinforce or counterattack anywhere within the division's sector. In restrictive terrain, the key to this mobility is to be positioned within reach of a road complex that supports rapid lateral and forward movement and deployment. These positions must also be relatively close to the projected areas of employment. Therein lies the difficulty. Those same trafficable sites along road complexes are the sites we use to position our howitzer batteries, combat trains/UMCPs, etc. Additionally, we

M1A1 passes through a "rock-drop" point obstacle on a division 2-way supply route.

must consider the likelihood the enemy will target road complexes such as these for reconnaissance efforts, and may thus pinpoint our reserve's location more easily.

Controlling Reserve Force Deployment Routes

These routes may or may not be in use as supply routes; in restricted terrain, it is almost certain they will be. Each route should be assigned to the "using" reserve task force, which will conduct route reconnaissance and security operations to deny the enemy's ability to emplace light infantry or special operations forces (SOF) along the route to interdict the movement of the reserve), ensure mobility (assuming that the brigade's habitual direct support (DS) engineer battalion has not been task-organized elsewhere), and maintain absolute control of brigade assets moving on the battlefield.

Route Reconnaissance and Security

Much of this will depend upon your expected threat. In restricted terrain, a small light infantry or SOF unit can interdict your use of a route through direct attack, observed indirect fires, or countermobility operations. Of these three, the last is the least likely to occur if the route is in continuous use. However, even if the route is in continuous use, the task force must reconnoiter it before moving significant forces on it, and must deny the enemy the opportunity to observe the route. The brigade and task force reconnaissance and surveillance (R&S) plans must be fully coordinated and developed with this in mind. R&S assets must be used to verify enemy actions along the deployment route(s), as well as in the reserve's expected areas of employment.

Controlling Route Usage

As mentioned earlier, one five-ton truck on the road at the wrong place/time can unhinge the employment of the division's reserve. (Imagine your southbound supply truck with its water trailer jackknifed in a "rock drop" point obstacle. Now imagine the northbound logistics package (LOGPAC) that gets stopped by it. Then include the northbound reserve task force behind the LOGPAC, enroute to conduct the division counterattack. Move the supply truck immediately, and you *still* have a significant delay in employing the reserve.) The brigade's DS engineer battalion may be able to provide some turn-outs to assist in clearing the route of damaged equipment, but they will not be able to turn that two-lane road into Interstate 65.

Changing Task Organization/Asset Handover

As the division's reserve force is committed, it is likely to have additional assets "chopped" to it. Link-up with these assets may only require the change of a radio frequency or a code (if the asset, such as a radar or sensor, is already sited to support the reserve force's commitment). It could also entail the physical movement of a unit to a link-up point on the ground where it would then join the reserve force's formation (as in the case of NBC reconnaissance, decontamination or smoke elements, engineers, air defense, or field artillery). In the latter situation, one technique is to position these assets forward along the reserve force's deployment route(s) so they may be folded into the march column as it moves forward. If these assets are not capable of providing for their own security or defense, the reserve may have to use a portion of its force to reconnoiter, quarter, and secure positions for these assets in order to ensure they will remain viable when needed for the reserve's commitment.

Positioning Supporting Assets

The previous point brings us to the positioning of supporting assets, specifically the artillery radars, IEW sensors, communications infrastructure, logistical installations, and command posts to facilitate the reserve's deployment and initial operations.

Ideally, all these assets will be emplaced so that they support the MBA forces and the probable areas of commitment for the reserve forces. In practice, at least a portion of this infrastructure will have to be repositioned to support the reserve once it has been committed, especially if it is to be used to counterattack to any significant depth. Again, these assets should be repositioned as early as is practicable to allow them to "set" and support the reserve's commitment.

This early repositioning also helps to solve potential traffic control problems, as these assets may have to use (or at least cross) the reserve's deployment route(s) as they reposition. Unfortunately, there is never enough "stuff" on the battlefield, and some assets supporting the MBA units may not be able to start supporting the reserve's counterattack until it is launched and enemy contact is made. Assets could potentially echelon in this case, with a portion displacing to support the reserve while a portion continues support to the MBA units.

If this is not possible, then these assets should be given priority to move to their new sites once they are able to "chop" from MBA support to counterattack support.

Communications

Communications support deserves special comment at this point. As stated earlier, C4I nodes must compete for

limited suitable terrain. To further complicate matters, it is conceivable the brigade may have task forces operating in separate defiles, hindering direct FM communications. Retransmission sites can become the key to maintaining digital fire support linkages and FM voice communications. Again, terrain management, site reconnaissance, and site security are important considerations. In extremely restricted terrain, the brigade may have to put a "string" on task force retransmission assets in order to ensure critical nets remain operational across the division's entire sector.

Command Posts and Logistical Support

When committed, the reserve may be moving into or through a highly congested MBA. If the brigade has been successful in planning for the initial sites of the brigade support area and the brigade main command post, they will be able to support/control at least the initial phases of the reserve's commitment and operations from those locations.

If the reserve is to counterattack to a significant depth on the battlefield, then the brigade main command post will have to bound forward to maintain communications, act as the brigade's asset and information coordination and clearing center, and plan future operations. The brigade tactical command post (TAC) will likely be echeloned forward of the brigade main command post to control the current battle. The brigade support area (BSA), being a space-intensive installation, will most likely not be able to move forward in its entirety.

As the brigade combat team moves forward, the forward support battalion (FSB) may have to echelon support through the use of forward logistical elements (FLEs). In severely restricted terrain with minimal lateral supply routes, the BSA may have to remain to the rear with FLEs echeloned forward on multiple routes to ensure timely support to the task forces.

Planning for Employment and Control of the Reserve

The intelligence preparation of the battlefield (IPB) is going to be an immense effort, since you must consider employment of the reserve anywhere within the division's sector. You must have the graphic control measures from the division, each brigade, and each task force/squadron posted on your maps. This should help you to understand the current battle conditions and locations as the reserve is committed.

The division, each brigade, and each task force/squadron must also have the reserve's graphic control measures posted, on at least one map in the command post. This exchange of graphics and information can help in avoiding situations where the reserve force encounters an unexpected mine/wire/crater/ditch across its deployment route. The reserve will also be better prepared to enter a brigade or task force area on commitment (as a counterattacking or as a reinforcing force) if it can quickly exchange information with the MBA unit using common graphics for reference points and locations.

Graphical Control Measures

The reserve brigade must plan for operations in an area initially assigned to another unit or units. Those units will have developed graphic control measures to support their operations. Those graphics may or may not support the intended operations of the reserve in that portion of the division's sector. If they do not, the brigade is faced with the task of issuing additional graphical control measures which allow rapid focusing of combat power without cluttering up the operations overlay.

One of the keys to successful reserve operations is the development of graphics that support the many employment options for the heavy brigade within the division's sector. Graphics offer a simple means for the commander to control his forces on the battlefield.

More important, however, is the role that they can play in relation to the enemy. We have found that, when reserve graphics are tied to the IPB, our ability to react/counteract to enemy actions is greatly enhanced. Having the S2 and S3 jointly develop the IPB, and tying the operational graphics to that process, has resulted in an improved understanding and use of the terrain in developing the scheme of maneuver and a better linkage between the scheme of maneuver and the reconnaissance and surveillance plan.

Target! Cease Fire!

No operation is ever as simple as it seems, and I have not provided a universal solution to the problem of planning for heavy force reserve operations in restricted terrain. What I hope to have accomplished is to have provided the reader with insights into some of the challenges of these operations, as well as some of some of their potential solutions.

Author's Note

The author wishes to acknowledge that the majority of the information presented in this article is a distillation of procedures developed and lessons learned by the members of the Iron Brigade Combat Team, 2d Infantry Division, Republic of Korea, over the past two years.

Lieutenant Colonel John L. Arata was commissioned in 1979 with a B.S. degree from Ohio State University. Since then, he has served in a variety of assignments, to include troop commander in Germany and CONUS, tank battalion S3 in CONUS, assistant professor of military science at Purdue University, and as the commander, Headquarters Company, U.S. Army at Fort Myer, Va. He earned an MSA degree from Central Michigan University in 1994, and graduated from the Air Command and Staff College at Maxwell AFB, Ala. in 1995. He was assigned as the S3, 1st Brigade, 2d Infantry Division, in the Republic of Korea when this article was written, and is currently assigned to the Operations Group, National Training Center, Fort Irwin, Calif.